# **ENCOPRESIS-PSYCHOGENIC SOILING\***

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FÆCAL SOILING in children is often emotional in etiology. Soiling is a symptom easily noted by the child's peers and may quickly lead to social ostracism. The child who soils, or his parents, may feel great shame and may not mention the soiling during a routine physical examination. pædiatric and psychiatric literature on soiling is unclear. Many terms have been used for the syndrome of soiling without organic cause. Weissenberg,1 in 1926, coined the word "encopresis" for fæcal incontinence as a term analogous to enuresis for urinary soiling.

Over a three-year period we have seen a group of 15 children with the main complaint of encopresis. These children ranged in age from two to 12 years and all but two were boys. This relatively high incidence in boys has been noted by other authors.<sup>5, 19</sup> Physical, radiological and laboratory studies in each child failed to show any gross abnormalities. In all cases a collaborative psychiatric study was made of the child and at least one parent, always the mother and frequently the father also. We have viewed this problem from a psychodynamic standpoint and have found it helpful in planning treatment and in estimating prognosis to subdivide the syndrome as follows:

- 1. (a) Primary infantile encopresis: The child has never been toilet-trained and persists in a pattern of infantile soiling. (b) Primary reactive encopresis: Here too the child has never been bowel-trained but soiling is caused by fæcal leakage in a syndrome of chronic constipation.
- 2. (a) Secondary infantile encopresis: The child, once bowel-trained, regresses under stress to a pattern of infantile soiling. (b) Secondary reactive encopresis: The child, formerly bowel-trained, soils but the soiling results from fæcal leakage and the child is basically severely constipated.

As with cases of enuresis, we have designated the illness as secondary if there was at one time normal bowel control, and primary if there has been no period when the child was bowel-trained.

### THE BACKGROUND

The child's individual capabilities and development usually determine the age at which bowel training is started. Some infants, even in the first weeks of life, become most anxious and agitated before they have a bowel movement: they contract their gluteal muscles and cross their legs in an attempt to retain their fæces. Some very young children concentrate intently as their bowels move and, on completion, relax in overwhelming

pleasure. Certain infants become most upset if their clothing is soiled, whereas others wallow luxuriously in their fæces. The constitutional strength of instincts regarding bowel excretion varies greatly with the child.

In exchange for maternal love and affection, the child controls his excretory processes. He learns the complicated defæcation habits of his culture. Toilet training is usually begun about the time when the child is beginning to walk and talk. This is the age when the normally developing child begins to understand his increasing separation and independence from mother. He enjoys this independence and glories in its mastery. Any threat of re-engulfment or of loss of this independence may throw the infant into an acute panic. He tends to react, or in many cases over-react, to any challenge to his individuality. This is the period when the child normally shows negativism and stubbornness. The greater the tie to mother, the more the infant may have to assert his separateness by reactive negativism.

Some mothers are more comfortable and gain greater emotional satisfaction with their child as a dependent infant. Such mothers are ambivalent or, in some instances, overtly opposed to their child's gaining increased self-control and independence. Equally destructive to the child's developing personality is the mother who assumes control of his physical processes. Under these home conditions, the child has no incentive and often no opportunity to develop bowel control.2

Children who are mentally backward may lag in acquiring bowel control as they do other skills. In the study of 70 encopretic American children by Shirley,<sup>3</sup> 21 were at an imbecile level. As Kanner notes, usually even an imbecile has stopped soiling by five years of age but parental neglect and defeatism may delay the acquisition of bowel control in feeble-minded children. In a family where there is no incentive to develop bowel control, even a child of normal intelligence may persist in a pattern of infantile soiling-each day he soils himself with one or several formed bowel movements. Such a patient is frequently enuretic also.5 These children are said to have primary infantile encopresis.

Under normal conditions, the older the child, the stronger is his personality structure. A young child, just bowel-trained, will regress to infantile soiling under the stress of an illness. Usually the older a child, the greater is the stress needed to produce such a regressive symptom. Where the child's personality development is inadequate, under the strain of family psychopathology, a lesser emotional assault may produce this profound regression. Marfan<sup>6</sup> found encopresis to occur more often in French school boys with a heavy study program, while Schachter in Bucharest commented on the increased incidence of soiling in illegitimate children and in children less favoured in the family group. During the British evacuation of school

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children during World War II, Burns<sup>8</sup> found an increase in the incidence of soiling. These factors, and many others cited,9-12 merely indicate stressful personality development and difficult life situations; they would all tend to favour regression. Regression to the point of fæcal smearing in children of above school age indicates personality fragmentation of psychotic proportions. We have found smearing of fæces only with psychotic children whom we have not included in this study. Children who regress under emotional stress to a pattern of infantile soiling are said to have secondary infantile encopresis.

When the mother tries to control completely the child's bowel function, the child, in a desperate attempt to maintain his independence and personality integrity, may react strongly and negativistically by withholding. Such a child may show the syndrome described by Jekelius<sup>13</sup> as "obstipatio paradoxa". These children have severe constination that often results in abdominal enlargement with palpable fæcal masses, rectal distension with fæces and usually perianal dermatitis. Soiling is caused by leakage of fæces. This syndrome has been variously described as constipation with incontinence,<sup>14</sup> psychogenic megacolon,<sup>15, 16</sup> pseudo-Hirschsprung's disease,<sup>17</sup> and idiopathic or functional megacolon.18 The classic history in these patients, as noted by Richmond and associates,16 is of infrequent bowel movements, with defæcation in a standing or supine position, often with much grunting, and periodic huge stools passed spontaneously or with the aid of enemas, suppositories or digital removal. The clinical course in such cases is usually benign. These children have been repeatedly described as stubborn and negativistic. We have seen this syndrome in children as a reaction to maternal overcontrol, and we have diagnosed these patients as having reactive encopresis. Reactive encopresis may be primary or secondary. Secondary reactive encopresis usually begins with a regression to infantile soiling under stress, but thereafter the mother's overzealous attempts to control the child's bowel function result in a withholding reaction by the patient and the development of the syndrome of reactive encopresis.

From the children in our study we shall illustrate the various types of encopresis, some of the etiological factors, and the treatment approach we have found most successful.

## PRIMARY INFANTILE ENCOPRESIS

Primary infantile encopresis occurred in only one case in our series.

Case 1.—"I was not going to kill some little child to get him trained by three years. If I pry on this little mind, I will make it worse. I don't want to kill the child in doing it. I hope he will outgrow it." The mother of this 10-year-old boy explained thus why her son was not yet toilet-trained at the time of his examination.

The patient had been soiling since birth. In his early years he was raised mainly by his maternal grandmother and aunt; his mother had returned to work when he was one month old. The parents moved from the maternal grandmother's household when the patient was three years old and not yet toilet-trained. To the aunt, who at that time offered advice with regard to bowel training, the mother had replied, "You're not washing his things, I am." Now, at the age of 10, the boy had been having two formed bowel motions a day, soiling himself each time. Soiling occurred usually during the day and rarely at night. This had been the pattern for many years. His mother never chastised him. For a few months during his seventh year, he was made to wash his underclothes, but this had produced no change in his symptoms. The patient's responses in play interviews generally were rather stereotyped and unimaginative. He expressed no shame or concern about his soiling.

The father blamed the mother for the boy's soiling-"She babies him up all the time." Toward his son, the patient, the father had been brutal and sadistic and had repeatedly disciplined the boy with no apparent cause-"to show him who is boss". The parents had fought constantly during the marriage. The mother, seductive and theatrical during the psychiatric interviews, described how her "cold, domineering" mother had forcibly and repeatedly given her enemas until she was eight or nine years of age. The maternal grandmother was still extremely bowel-conscious, but the patient's mother denied that she had any preoccupations with her own bowels. Although the boy was of normal stature and physical development, the mother repeatedly emphasized that the patient was small and immature—"He's so tiny, so babyish."

Comment.-This boy had no incentive to control his bowels. His mother felt more comfortable treating him as if he were a tiny baby. To her, bowel training was equated with killing. In the mother's mind, the destruction of her son would occur were he to control his bowel processes and develop normal maturity. The father had to show the boy that father was boss; he brutally curbed any show of masculine assertiveness.

The patient was taken in treatment with a kindly, supporting therapist who expected and approved of the boy's gaining control of his own bowels. Within a six-week period, soiling cleared and did not recur.

## SECONDARY INFANTILE ENCOPRESIS

Two cases in this series of soiling patients were classified as examples of secondary infantile encopresis. These children had been fully toilet-trained but regressed to a pattern of infantile soiling under emotional stress.

CASE 2.-One month before the psychiatric evaluation, this three and one-half year old boy was hospitalized with severe burns over the lower part of the abdomen, the genitalia and the thighs, involving about 30% of his body surface. While at play, he had set fire to the family gasoline tank. In the hospital he had repeated blood transfusions and four skin-grafting procedures. A psychiatric evaluation was requested because the patient was becoming increasingly withdrawn and uncommunicative. He had become enuretic and had started to soil his bed repeatedly.

When we first saw the boy, he cried continuously but otherwise lay motionless in bed. He was seen for supportive psychotherapy daily for almost two months until his hospital dismissal. His enuresis and encopresis cleared within a week, and he progressed to the point of undergoing painful changes of dressings without anæsthesia. Within the first week of therapy he revealed to the therapist his overwhelming fear and loneliness.

Both parents were very dependent on their own parents for guidance. The patient's mother, wellmeaning but immature, told how she "babied" this boy, the youngest of her three children. She had raised her family according to instructions she had read in a magazine article. The father was shy and defensive; he admitted he drank too much too often, and that he tended to "fly off the handle" and spank his children excessively.

Comment.-An accident such as this would be extremely threatening to any child. It poses an overwhelming threat of annihilation, Hospitalization and the many medical and surgical procedures would be an emotional strain to any child. This patient showed inability to meet these stresses in his social withdrawal and regression to an infantile pattern of enuresis and encopresis.

The other patient with secondary infantile encopresis, a seven-year-old boy, regressed to infantile soiling when he was moved from a crib in the parental bedroom into a room of his own. He too had been "babied" and pampered. With support and encouragement, he also quickly recovered from his soiling. Immaturity and insecurity were the outstanding characteristics of these two patients. Their personality inadequacy, a reflection of the immaturity of their parents, caused them to regress to soiling under emotional stress.

Regression to infantile soiling in the face of emotional trauma is frequently seen in young children. Such patients are usually not seen by pædiatric psychiatrists because the soiling is, in most cases, infrequent and soon clears. Where such soiling does persist, it usually indicates severe emotional stress, weak personality development, or both factors together. These children have once been bowel-trained and in response to meaningful support and approval from a significant adult (parent, general practitioner or pædiatrician) they will regain bowel control.

### PRIMARY REACTIVE ENCOPRESIS

Much more frequent in our psychiatric referrals was the syndrome of primary reactive encopresis, which was present in seven of our 15 cases.

CASE 3.-"Whenever I give him enemas, I always need help to hold the pest down." As described by the mother, this four and one-half year old boy did not relish her controlling his bowels.

The mother, who brought 15 pages of notes with her, claimed that this child had been constipated since birth. When he was 10 days old, two days after arriving home from the hospital, the mother called the doctor because her baby could not have a daily bowel movement. From that time he was "chronically constipated". By the age of 11 months, according to the mother, the child would apparently hold the stools back-"He became very red-faced, grunted, and would cross his legs to prevent himself from having a bowel movement." He was then having a hard, firm bowel movement every three days. When the child was 15 months old the home physician dilated the boy's rectum once a day for a period of two weeks. This helped symptomatically for three weeks. The mother started giving the boy laxatives and castor oil each day when the patient was 18 months old. One month later enemas were prescribed by the home physician. Administration of these enemas gradually was increased in frequency; at the time of the psychiatric evaluation, they were being given twice a day. The child would soil between bowel movements, which occurred only once a week. He tended to defæcate in a standing position.

The mother had seen no need for a physical or psychiatric evaluation of the patient and had brought the child only at the insistence of the maternal grandmother. The mother repeatedly minimized the boy's symptoms-"The grunting and the soiling are only embarrassing when someone is at home." Concerning the four or five changes of underclothing per day, the mother said, "I am used to it."

The patient's mother was an only child. She described her own mother as a "cold disciplinarian" and always "bowel-conscious". She was much closer to her father, whom she constantly referred to as "my lamb". The patient's mother had very much wanted a girl for this, her first child, and was extremely disappointed in the birth of the patient. During the interviews she repeatedly referred to him as "the pest". The child had been an increasing behaviour problem for six months before this evaluation. He was stubborn and was liable to have temper tantrums.

The patient himself was a good-looking, curlyheaded boy who related well to the interviewer. He tended to play by himself and refused to play with clay, describing it as fæces. He soiled himself during his play sessions.

Comment.—This boy's excretory processes had been manipulated and controlled since birth. His mother's hostility and destructiveness toward him were openly expressed. This mother consciously wished her child to achieve bowel control, yet she tried to prevent him from gaining control. She balked at physical and psychiatric examinations for the child; in many ways she appeared to gain gratification from the boy's symptoms.

#### SECONDARY REACTIVE ENCOPRESIS

In the necessary psychological setting, secondary encopresis may continue in a chronic state, usually as secondary reactive encopresis. This occurred in five of our cases.

CASE 4.—Three years before her evaluation, this seven-vear-old girl had an attack of cystitis with dysuria, bacilluria and diarrhœa. The urinary infection cleared within three months, but chronic constipation with recurrent fæcal soiling persisted. She had chronic perineal irritation. When the initial diarrhœa developed, the mother started the practice, which continued to the time of the psychiatric evaluation, of washing and powdering the girl's perineum and genitalia several times a day. She also began the routine of going to the patient's school every lunch period to inspect the girl and change her panties. The patient developed the habit of pulling her panties backwards and forwards, thus creating perineal friction. Since the onset of chronic constipation, the mother regularly, several times per week, had given the girl laxatives, suppositories and enemas.

The patient was the youngest of three girls. The mother recounted a hectic marital career. Her first husband was institutionalized as a sexual sadist; the second, who married her bigamously, was a practising homosexual; the third husband, the patient's father, was another sexual sadist; her fourth and current husband was said to be a "gentleman". Her own father was also a brutal sadist and her mother a "stupid fool" and a "doormat for father". Her oldest daughter, the patient's sister, had undergone a course of insulininduced shock treatments at the age of 16 years. The mother felt her middle daughter, 15 years old at the time of the interviews, was going to become a prosti-

The patient herself was timid and obviously depressed. She lacked the sparkle of a normal child. She told how her mother "is only concerned with my B.M.'s".

Comment.—This mother, too, consciously wished her daughter to gain bowel control. Continuing bowel symptoms spurred the mother to increasing attempts to regulate the child's bowels. Nevertheless, the child was given the impression that her mother gained gratification because of the soiling; by constant and overzealous interest in the child's excretory habits the mother gave the girl to understand that soiling was expected of her.

#### DISCUSSION

Encopresis in a child reflects underlying family psychopathology. Many children soil because in this way they can gain approval from the significant parent. One parent, or both, may feel more comfortable with the child as a soiling, wetting infant. The young patient naturally tries to gratify the parent. The parents themselves need to be shown their own role in the symptom production. In many cases where there is an infantile pattern of soiling, the doctor, by acting as an approving, supportive parent-substitute, can give the child the necessary unambivalent warm encouragement so that normal bowel habits are established and soiling clears. In these cases extensive psychiatric treatment may not be required.

Reactive encopresis indicates more malignant family psychopathology. The maternal need to control the child often poorly conceals her underlying hostility to the child who may be identified in the mother's mind with some hated parent, sibling or relative. Frequently it is obvious that the mother is encouraging the soiling in a subtle, although usually unconscious, fashion. The mother of one patient in our series had the habit of pulling open her son's pants and remarking, "Well, you haven't done it yet." Another mother, whose child had been under psychiatric treatment for four years for chronic reactive soiling, for one and onehalf years insisted on taking the child's soiled clothing home from the hospital so that she might wash it herself; it was only after several interviews that she began to realize that she obtained emotional gratification from washing these soiled clothes. Vaughan and Cashmore at Guy's Hospital<sup>19</sup> also noted that some mothers are "unwilling" to allow this symptom of soiling to disappear.

Many of these cases of reactive encopresis, primary or secondary, receive treatment of various kinds for many years without effect. Until it was recognized that most if not all of such cases require collaborative treatment of the mother and child, symptomatic cure was not usually forthcoming. Reactive encopresis is difficult to treat in general practice or ordinary pædiatric practice and these cases are more readily treated in a child psychiatry centre. The family doctor must take care lest he be drawn into the family turmoil as a supplier of enemas, laxatives and suppositories to the mother for her assault and control of the child. By the time the child is seen, his antisocial mode of bowel excretion has usually become as automatic for him as normal bowel habits are for normally trained children. Retraining may be long and difficult.

#### SUMMARY

Encopresis, or fæcal incontinence not caused by organic defect or illness, can be primary, occurring in children who have never been toilet-trained, or secondary, where it occurs in children who have been bowel-trained. Children who soil in a regressed infantile fashion usually gain a symptomatic cure in response to supportive, approving treatment. Such treatment can be well undertaken by a general practitioner or pædiatrician. Reactive encopresis, on the other hand, indicates much more serious family psychopathology. These patients and their families require intensive and frequently prolonged treatment. This is usually best undertaken in a psychiatric setting.

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#### RÉSUMÉ

La raison pour laquelle l'enfant se souille est souvent d'origine émotive. Cette tendance à l'incontinence fécale a reçu le nom d'encoprésie. L'auteur a vu 15 de ces cas au cours d'une période de trois ans. Tous sauf deux étaient des garçons dont les âges s'échelonnaient de 2 à 12 ans. Aucun d'entre eux ne présentait de lésions organiques. Au point de vue psycho-dynamique l'auteur a adopté la classification d'encoprésie infantile primaire et secondaire et d'encoprésie réactive primaire et secondaire. Sont portés au groupe primaire les enfants à qui on n'a jamais enseigné d'habitudes de propreté; les autres, qui en ont contracté (même s'ils semblent les avoir oubliées), sont versés au groupe secondaire.

L'enfant peut chercher à contrôler ses excrétions en retour de l'affection et de l'amour maternels. Cet entraînement doit commencer vers l'âge où l'enfant apprend à parler et à marcher. Ces premières manifestations d'indépendance envers la mère sont accompagnées de négativisme et d'entêtement. L'enfant arriéré peut tarder à acquérir ces habitudes et l'incontinence fécale ou urinaire n'est pas rare chez les jeunes débiles. Ces habitudes deviennent mieux enracinées avec l'âge, elles peuvent tout de même faillir en période de troubles ou de traumatismes émotifs. L'enfant qui résiste à cet entraînement peut réagir en manifestant de l'"obstipatio paradoxa" et refuser d'aller à la selle; l'incontinence fécale résulte de ce mégacôlon psychogène.

Ce désordre ne reflète souvent que la psychopathologie du milieu familial. La mère qui se refuse à voir grandir son enfant et qui n'admet pas qu'il puisse un jour ne plus être un nourrisson s'expose à laver des langes et des sous-vêtements souillés pendant des années. D'autre part, le besoin de certains parents d'exercer un contrôle minutieux sur l'enfant, même dans ses fonctions naturelles, par l'entremise de lavements à horaire fixe, de purgations et d'autres manipulations du même genre, au lieu de n'apporter à ces choses que l'importance qui leur convient, n'est qu'une démonstration superficielle d'intérêt qui cache souvent la réjection de l'enfant par la mère. L'auteur cite quatre cas à l'appui.

# LIQUID NITROGEN THERAPY OF WARTS AND OTHER SKIN LESIONS\*

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IN RECENT years liquid nitrogen has become readily available for dermatological therapy. The purpose of this presentation is to report on a study of therapy of verrucæ and other skin lesions with this modality, to point out its practicability in dermatology and to describe the technique of application in these conditions.

Cryotherapy has been a useful method of dermatological therapy since the turn of the century. Liquid air was apparently the first agent used on the skin for refrigeration. In 1899, White published an article on the properties and use of liquid air in medicine and surgery. In 1907, Pusey2 recommended the use of frozen carbon dioxide in preference to liquid air, pointing out the practical difficulties in obtaining and storing the latter at that time. Solid carbon dioxide has remained a satisfactory method for treating certain types of skin lesions including certain hæmangiomata, some lesions of chronic discoid lupus erythematosus and some stages of acne vulgaris. Gold,3 in 1910, compared the use of liquid air and solid carbon dioxide, and found liquid air preferable in every respect except availability. Irvine and Turnacliff, in 1929, related experiments with liquid oxygen and concluded that it was a more satisfactory substance for removal of warts than other methods. No subsequent reports of its use are noted until 1948, when Kile and Welsh<sup>5</sup> reported

Good results with the use of liquid nitrogen in the treatment of many skin lesions were reported by Allington<sup>6</sup> in 1950, and by Zeligman and Robinson<sup>7</sup> in 1955. Since liquid nitrogen has become available it could be expected to replace liquid air and liquid oxygen as it does not support combustion, thus eliminating the fire hazard. Liquid nitrogen is an inert, odourless, colourless liquid with a temperature of -195.8° C. (-320.4° F.) and constantly vaporizes. Table I compares liquid nitrogen with liquid air, liquid oxygen and solid carbon dioxide. .

TABLE I.

|                      | Temperature              | Ability to support combustion |
|----------------------|--------------------------|-------------------------------|
| Liquid air           | -191.5°C.<br>(-312.7°F.) | ++                            |
| Liquid oxygen        | -182.9°C.<br>(-297.2°F.) | ++++                          |
| Liquid nitrogen      | -195.8°C.<br>(-320.4°F.) |                               |
| Solid carbon dioxide | -78.5°C.<br>(-109.3°F.)  |                               |

## MATERIAL

The liquid nitrogen used in this study was obtained from a commercial source and collected in a litre thermos-bottle, the plastic cap and the cork being discarded and an absorbent cotton stopper used instead. It is important to stress that the container should not be tightly capped since gas must be allowed to escape in order to prevent pressure

on the use of liquid oxygen and observed that it was effective in more than 1000 patients.

<sup>\*</sup>Read at the annual meeting of the Canadian Dermatological Association held in Montreal, June 1959.